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Quazi

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[54] **METHOD FOR DETECTING ACOUSTIC SIGNALS FROM AN UNDERWATER SOURCE**

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[52] **U.S. Cl.** **367/135**; 367/98; 367/131

[58] **Field of Search** 367/135, 136, 367/124, 98, 87, 131; 395/2.09; 364/423

[56] **References Cited**

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[57] **ABSTRACT**

A method for detecting radiated and reflected acoustic signals from an underwater source, wherein the acoustic signals are present in a random noise environment and form an output therewith. The method includes the steps of operating an entropy-based acoustic receiver to receive the output, calculating the entropy of the received output, and comparing the calculated entropy with a selected entropy threshold value. A substantial difference is indicative of the presence of an acoustic signal from an underwater source. A less than substantial difference is indicative of a lack of presence of an acoustic signal from an underwater source.

5 Claims, 2 Drawing Sheets